

ENVIRONMENTAL IMPACT ANALYSIS

## 4.11 TRANSPORTATION

### Acronyms

|          |  |
|----------|--|
| Caltrans | California Department of Transportation        |
| CD       | Control delay                                  |
| CEQA     | California Environmental Quality Act           |
| CMP      | Congestion Management Program                  |
| EIR      | Environmental Impact Report                    |
| GHG      | Greenhouse gas                                 |
| HCM      | Highway Capacity Manual                        |
| LADOT    | Los Angeles Department of Transportation       |
| LOS      | Level of Service                               |
| OPR      | Governor's Office of Planning and Research     |
| PCE      | Passenger Car Equivalent                       |
| RTP      | Regional Transportation Plan                   |
| SB       | Senate Bill                                    |
| SCAG     | Southern California Association of Governments |
| SCLF     | Scholl Canyon Landfill                         |
| SRTS     | Safe Routes to School                          |
| V/C      | Volume to capacity ratio                       |
| VMT      | Vehicle miles traveled                         |
| vphpl    | Vehicles per hour per lane                     |

This section discusses the roadways and existing traffic in the vicinity of the proposed Project, the increase in traffic associated with the construction and operation of the proposed Project, and a discussion of the level of significance of those increases.

For the purposes of this section, the network of freeways and roadways surrounding the proposed Project site is referred to as the existing roadway system. Although the proposed Project site is located within the City of Glendale, California, the roadway system used to access the site is primarily located within the City of Los Angeles, California. Therefore, this section focuses on those roadways relevant to the proposed Project within the City of Los Angeles.



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#### 4.11.1 Environmental Setting

##### 4.11.1.1 Existing Conditions

###### Regional Transportation Network

The existing regional transportation network with the potential to be impacted by the proposed Project includes State Route 134. State Route 134 is an east-west state route through Los Angeles County that provides interregional access to the proposed Project site via the interchange with North Figueroa Street. Part of the Congestion Management Program (CMP), State Route 134 originates at the Route 134/170/101 interchange and runs a distance of 13.34 miles, terminating at the Route 134/210 interchange. State Route 134 is classified as an urban principal arterial and contains four travel lanes and a high occupancy vehicle lane in each direction in the study area.

###### Local Transportation Network

The existing local transportation network with the potential to be impacted by the proposed Project includes North Figueroa Street. Figueroa Street is a two- to four-lane north-south Secondary Highway that extends north from John S Gibson Blvd. in Los Angeles and terminates at State Route 134 near Eagle Rock. The roadway provides access to the urbanized areas south of State Route 134 and Scholl Canyon Road north of State Route 134. The State Route 134 Eastbound Ramps/North Figueroa Street intersection is controlled by a traffic signal and the State Route 134 Westbound Ramps/North Figueroa Street intersection is controlled by an all-way stop.

###### Project Vicinity Primary Site Access and Parking

###### *Project Site Access*

The proposed Project location is accessed exclusively by Scholl Canyon Road. North Figueroa Street turns into Scholl Canyon Road at the State Route 134 Westbound Ramps/North Figueroa Street intersection. Scholl Canyon Road is a two-lane road that terminates at the Scholl Canyon Landfill (SCLF).

###### *Parking and Temporary Parking Lot Access*

Parking for construction workers would be provided on-site within the boundary of the landfill. The laydown and equipment storage area would also be within the boundary of the landfill. No offsite parking or material storage would be required.

###### Bicycle Facilities

There are no designated bicycle facilities in the proposed Project area.

###### Railways

There are no designated railways in the proposed Project area.

###### Transit

There is no designated public transportation in the proposed Project area.



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### 4.11.2 Laws, Ordinances, Regulations and Standards

#### 4.11.2.1 State

##### Senate Bill 743

Senate Bill (SB) 743 required the Governor's Office of Planning and Research (OPR) to revise the guidelines for conducting transportation analyses and identify new metrics for identifying and mitigating transportation impacts under California Environmental Quality Act (CEQA). OPR identified vehicle miles traveled (VMT) per capita and VMT per employee as the new metrics for transportation analysis. Thus, the reliance on roadway capacity, level of service, and delay as performance measures will no longer constitute a significant environmental effect under CEQA. The intent is to encourage smart growth and infill developments and reduce the amount of greenhouse gas (GHG) emissions produced by vehicle travel.

Agencies, such as the California Department of Transportation (Caltrans), are starting to make progress with early implementation of SB 743 by evolving their transportation analysis to be more multimodal. Caltrans prepared both a Draft Transportation Analysis Framework and Draft Transportation Analysis under CEQA in March 2020. In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including the Guidelines section implementing Senate Bill 743 (§ 15064.3). The requirement in CEQA Guidelines Section 15064.3 to use VMT as the metric for transportation analysis takes effect on July 1<sup>st</sup>, 2020. At the time this EIR was prepared, the City had not yet established a VMT threshold. In addition, the proposed Project would not result in a change to long-term Project traffic levels or trip lengths compared to baseline conditions, therefore VMT analysis is not applicable to the proposed Project.

##### General Roadway Regulation – Caltrans

Caltrans regulates and maintains State and Interstate roadways (state routes, highways, freeways) in the State of California. In areas with State roadways, Caltrans has the responsibility to maintain these roadways while the local jurisdictions (e.g., City and County transportation departments) are responsible for maintaining local roads. Local jurisdictions work with Caltrans to achieve transportation service requirements and improvements.

The Project site is located in Caltrans District 7, which includes Los Angeles County. This district is responsible for planning, designing, and maintaining State highways in the general area of the proposed Project site, including Interstate 5 and State Route 134.

#### 4.11.2.2 Local

##### Regional Transportation Plan – Southern California Association of Governments

The Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) is a long-term vision document that outlines transportation goals, objectives, and policies for the SCAG region, including Los Angeles County (SCAG 2016). The latest SCAG RTP, adopted in April 2012, includes an assessment of overall growth and economic trends in the region and provides strategic



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direction for transportation capital investments to support more efficient and “sustainable” modes of transportation from 2012 through 2035. Future planning will promote the use of bus and light rail transit, passenger high speed rail, and other Transportation Demand Management strategies.

City of Glendale General Plan  
*Land Use Element - Circulation*

**Goal:** Ensure that existing development is provided with adequate and safe streets

**Goal:** Provide adequate streets in advance of development capable of accommodating traffic associated with proposed uses

*Circulation Element*

**Goal 2:** Minimization of congestion, air pollution, and noise associated with motor vehicles

**Goal 3:** Reasonable access to services and goods in Glendale by a variety of transportation modes

**Goal 4:** Functional and safe streetscapes that are aesthetically pleasing for both pedestrians and vehicular travel

City of Glendale Bicycle Transportation Plan

The Glendale Bicycle Transportation Plan serves as a guide to the City in planning, development, design, and maintenance for new and upgraded bicycle facilities for the next 20 years. The Bicycle Transportation Plan will be updated every five years to inventory and evaluate changes to infrastructure, and to adjust planned facilities based on changing future conditions. The Glendale Bicycle Transportation Plan is compliant with Caltrans Bicycle Transportation Account requirements.

**Goal 1:** Create an environment where people of all ages can circulate safely and easily on a bicycle

**Goal 2:** Increase the number of bicyclists by enticing more people to use their bicycles instead of driving

**Goal 3:** Promote the health of Glendale residents

**Goal 4:** Enhance the economic viability of Glendale

**Goal 5:** Reduce greenhouse gas emissions and energy consumption

**Goal 6:** Develop and implement an educational program for safe bicycling

The Glendale Bicycle Transportation Plan outlines the following policies in order to accomplish these goals.

**Policy 1:** The City will develop a complete bikeway network throughout Glendale

**Policy 2:** The City will actively accommodate and encourage safe and convenient bicycle utilitarian trips to schools, employment sites, stores, parks, and other destinations throughout Glendale



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**Policy 3:** The City will take steps to reduce the bicycle-involved crash rate (fewer crashes per mile ridden)

**Policy 4:** The City will make bicycle parking available, secure, and convenient throughout Glendale

**Policy 5:** The City will work to implement Safe Routes to School (SRTS) programs in each Glendale school within the next 10 years

**Policy 6:** The City will ensure that new development is bikeable, walkable, and barrier-free

**Policy 7:** The City will implement this Bicycle Transportation Plan within 20 years

### 4.11.3 Methodology and Thresholds of Significance

#### 4.11.3.1 Methodology

#### 4.11.3.2 Level of Service Criteria

The standard measure used to identify intersection and ramp operating conditions is known as the Level of Service (LOS). LOS compares the volume of traffic at an intersection to the capacity the intersection is capable of handling and is expressed as a volume to capacity ratio (V/C). A LOS letter scale from 'A' to 'F' is then assigned to the intersection with LOS A representing free flow conditions and LOS F representing overly congested conditions.

The State Route 134 Westbound Ramps/North Figueroa Street intersection and the State Route 134 Eastbound Ramps/ North Figueroa Street intersection (collectively the 'study area') includes signalized and unsignalized intersections. **Table 43** summarizes the LOS definitions for signalized intersections. The Cities of Glendale and Los Angeles do not provide level of service standards for unsignalized intersections.

**Table 43 Level of Service Standards for Signalized Intersections**

| LOS   | Description  | V/C Ratio     |
|---|--|---------------|
| A   | Excellent. No vehicle waits longer than one red light and no approach phase is fully used.   | 0.000 – 0.600 |
| B   | Very good. An occasional approach is fully utilized; mainly drivers begin to feel somewhat restricted within groups of vehicles.           | 0.601 – 0.700 |
| C   | The number of vehicles stopping becomes significant, though many still pass through the intersection without stopping.                     | 0.701 – 0.800 |
| D   | The influence of congestion becomes more noticeable. Many vehicles stop and the proportion of vehicles not stopping declines.              | 0.801 – 0.900 |
| E   | Results in delay considered to be unacceptable.  | 0.901 – 1.000 |
| F   | Considered unacceptable to most drivers, often occurs with oversaturation, when arriving traffic exceeds the capacity at the intersection. | >1.000        |
| Los Angeles Department of Transportation, Los Angeles Department of Transportation Traffic Study Policies and Procedures, 2013. |  |               |



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The study area intersections are also within Caltrans' jurisdiction which triggers a review using the Highway Capacity Manual (HCM)<sup>71</sup> method for evaluating intersections. The HCM method measures the 'control delay' (CD) which is the wait time at the intersection in seconds per vehicle. According to the HCM, the following LOS standards, shown in Table 44, are used for intersections at Caltrans ramps:

**Table 44 Level of Service Standards for Intersections at Caltrans Ramps**

| LOS | Description   | Control Delay (Signalized) | Control Delay (Un-Signalized) |
|-----|---|----------------------------|-------------------------------|
| A   | Very low delay. Most vehicles do not stop at the intersection.  | ≤10 seconds/vehicle        | ≤10 seconds/vehicle           |
| B   | More vehicles stop than with LOS A, causing higher delays.  | >10 – 20 seconds/vehicle   | >10 – 15 seconds/vehicle      |
| C   | The number of vehicles stopping becomes significant, though many still pass through the intersection without stopping                     | >20 - 35 seconds/vehicle   | >15 – 25 seconds/vehicle      |
| D   | The influence of congestion becomes more noticeable. Many vehicles stop and the proportion of vehicles not stopping declines.             | >35 - 55 seconds/vehicle   | >25 – 35 seconds/vehicle      |
| E   | Results in delay considered to be unacceptable.   | >55 - 80 seconds/vehicle   | >35 – 50 seconds/vehicle      |
| F   | Considered unacceptable to most drivers, often occurs with oversaturation, when arriving traffic exceeds the capacity at the intersection | >80 seconds/vehicle        | >50 seconds/vehicle           |

*Transportation Research Board, Highway Capacity Manual, 2010.*

The study area also contains metered and non-metered on/off ramps. According to the Caltrans Ramp Meter Design Manual, a single lane metered on-ramp can generally handle at most 900 vehicles per hour per lane (vphpl). According to the Highway Design Manual a single non-metered off ramp can accommodate up to 1,500 vphpl. Based on this, the following LOS standards, shown in **Table 45**, are used for the west and east bound ramps:

**Table 45 Level of Service Standards for Ramps**

| Ramp Structure                         | Capacity (vphpl) | LOS A (V/C=0.6) | LOS B (V/C=0.7) | LOS C (V/C=0.8) | LOS D (V/C=0.9) | LOS E (V/C=1.0) | LOS F (V/C>1.0) |
|--|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Metered one lane on-ramp               | 900              | 540             | 630             | 720             | 810             | 900             | >900            |
| Metered 1.5 lanes on-ramp <sup>1</sup> | 1,500            | 900             | 1,050           | 1,200           | 1,350           | 1,500           | >1,500          |
| Non-Metered one lane off-ramp          | 1,500            | 900             | 1,050           | 1,200           | 1,350           | 1,500           | >1,500          |

vphpl = vehicles per hour per lane; V/C = vehicles to capacity  
1 = Two mixed flow lanes at the meter that merge to one lane post meter

<sup>71</sup> Highway Capacity Manual, Transportation Research Board, 2010.



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### 4.11.3.3 Existing Levels of Service

To determine the existing LOS at the subject area, Stantec subcontracted National Data & Surveying Services of Beverly Hills, California to conduct traffic counts on Thursday May 26, 2016. Traffic count results are provided in Appendix K.1 and summarized below in Table 46 and 47.

**Table 46 Existing AM and PM Peak Hour Intersection Levels of Service**

| Intersection                                     | AM Peak Hour |               | PM Peak Hour |               |
|--|--------------|---------------|--------------|---------------|
|  | (V/C) / LOS  | CD / LOS      | (V/C) / LOS  | CD / LOS      |
| Figueroa Street/ State Route 134 Eastbound Ramps | 0.706 / C    | 12.2 sec / B  | 0.697 / B    | 13.2 sec / B  |
| Figueroa Street/ State Route 134 Westbound Ramps | N/A          | 59.30 sec / F | N/A          | 16.91 sec / C |

**Table 47 Existing Level of Service Standards for Ramps**

| Ramp Segment  | Ramp Conditions       | Capacity (vphpl) | AM Peak Hour |       |     | PM Peak Hour |       |     |
|---|-----------------------|------------------|--------------|-------|-----|--------------|-------|-----|
|   |                       |                  | PCE Vol.     | V/C   | LOS | PCE Vol.     | V/C   | LOS |
| State Route 134 eastbound on-ramp at Figueroa Street  | Metered One Lane      | 900              | 581          | 0.646 | B   | 389          | 0.432 | A   |
| State Route 134 eastbound off-ramp at Figueroa Street | Non-Metered One Lane  | 1,500            | 604          | 0.403 | A   | 775          | 0.517 | A   |
| State Route 134 westbound on-ramp at Figueroa Street  | Metered 1.5 Lanes     | 1,500            | 748          | 0.499 | A   | 522          | 0.348 | A   |
| State Route 134 westbound off-ramp at Figueroa Street | Non-Metered 1.5 lanes | 1,500            | 282          | 0.188 | A   | 286          | 0.191 | A   |

### 4.11.3.4 Thresholds of Significance

As determined in the Initial Study, the proposed Project would not include or require design improvements or alterations to the public roadway network that could increase design or incompatible use hazards. Only on-road vehicles would be accessing the proposed Project site via the existing roadway network. As there would be no resulting impacts for this topic, only the following three checklist questions are evaluated this Environmental Impact Report (EIR).

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project would have a significant impact related to transportation and traffic if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- Conflict or be consistent with CEQA Guidelines section 15064.3 subdivision (b).



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- Result in inadequate emergency access.

### 4.11.4 Project Impacts

***Threshold: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

#### 4.11.4.1 Construction

The construction of the proposed Project is short-term (18 months) and would involve up to 42 PCE (passenger car equivalent) vehicle trips on peak days, which would equate to an average of five trips per hour assuming an eight-hour workday. It is expected that six PCE vehicle trips per day would be generated during the proposed Project's long-term operation, which would equate to an average of one trip per hour assuming an eight-hour workday. Although construction of the proposed Project will increase the volume of traffic present in the existing roadway network, the minimal trip increases will not change the V/C at the study-area intersections or ramps. Therefore, impacts would be less than significant.

##### Mitigation Measures

No mitigation measures are required.

#### 4.11.4.2 Operation

Refer to Section 4.11.4.1

##### Mitigation Measures

No mitigation measures are required.

***Threshold: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

#### 4.11.4.3 Construction

##### Ramps

The Los Angeles County Congestion Management Program states that a significant adverse traffic impact would occur on a CMP highway network if traffic from a proposed Project results in a ramp operating at an unacceptable LOS of D or F and an increase in the V/C ratio of greater than or equal to 0.02. The existing LOS for ramps in the study area are all currently operating at a LOS A or B. These LOS will not change as a result of the traffic associated with the proposed Project; all ramps would continue to operate at a LOS A or B. Therefore, there is no significant impact.

##### Intersections

The City of Los Angeles does not have thresholds for unsignalized intersections. The Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures states that a significant





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adverse traffic impact would occur at a signalized intersection if: traffic from the proposed Project results in an intersection operating at a LOS C and an increase in the V/C of greater than or equal to 0.04; or if traffic from the proposed Project results in an intersection operating at a LOS D and an increase in the V/C of greater than or equal to 0.02; or if traffic from the proposed Project results in an intersection operating at a LOS E or F and an increase in the V/C of greater than or equal to 0.01. The existing LOS for signalized intersections in the study area is LOS C in the am and LOS B in the pm. The LOS in the am will remain the same; however, the LOS in the pm will change to LOS C as a result of the short-term traffic associated with construction of the proposed Project. The V/C increase associated with the pm change in LOS (0.013) is less than 0.04. Therefore, there is no significant impact.

The study area intersections are also within Caltrans jurisdiction, which triggers an additional review using the Highway Capacity Manual method for evaluating intersections. The existing LOS for intersections in the study area is LOS B in the am and pm (for eastbound ramps) and LOS F in the am and LOS C in the pm (for westbound ramps). These LOS will not change as a result of the traffic associated with the proposed Project. The addition of an average of one peak hour trip would not have the potential to change the intersection levels of service. Therefore, no significant impact would be generated based on Caltrans impact thresholds.

### Mitigation Measures

No mitigation measures are required.

#### **4.11.4.4 Operation**

Refer to Section 4.11.4.3

### Mitigation Measures

No mitigation measures are required.

***Threshold: Would the Project result in inadequate emergency access?***

#### **4.11.4.5 Construction**

Construction vehicles are not anticipated to block roadways or intersections, reduce speed below the speed limit on roadways, or to interfere with access of emergency vehicles. The proposed Project does not include any component that would result in inadequate emergency access to the site or surrounding areas. Therefore, there is no impact.

### Mitigation Measures

No mitigation measures are required.

#### **4.11.4.6 Operation**

Please refer to Section 4.11.4.5



**DRAFT ENVIRONMENTAL IMPACT REPORT  
CITY OF GLENDALE BIOGAS RENEWABLE GENERATION PROJECT**

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**Mitigation Measures**

No mitigation measures are required.

**4.11.5 Cumulative Impacts**

The proposed Project includes a minor increase in operation phase traffic compared to that which currently exists and does not have the potential to contribute to a cumulatively considerable long-term impact. Although construction of the proposed Project would temporarily increase the volume of traffic present in the existing roadway network, the increase will not cause the LOS to exceed the thresholds for significant impacts. The LOS at ramps or intersections will not change as a result of the traffic associated with the proposed Project. The proposed Project and the proposed Grayson Repowering Project would utilize different roadways and therefore would not have the potential to contribute to potential cumulative impacts.

